

## Chapter 2 Solutions

### Review Questions

1. Which of the following is *not* a valid Windows Server 2008 installation option?
  - b. A Server Core upgrade from Windows Server 2003
2. What is required to install the Hyper-V server role? (Choose all that apply.)
  - a. A 64-bit processor
  - c. AMD-V or Intel-VT extensions
3. Which Windows Server 2008 edition does not support the Server Core installation?  
Windows Web Server 2008
4. Which of the following is true when purchasing a motherboard with multiple CPU sockets?
  - c. All installed CPUs must be identical.
5. You're trying to decide which disk technology to use on your new server. The server will be in heavy use around the clock every day, so high performance is a necessity. Which technology is the best choice?
  - d. SCSI
6. You can use a 32-bit processor to install the Hyper-V role as long as it supports virtualization extensions. True or False?  
False
7. Which networking protocol is installed by default in Windows Server 2008? (Choose all that apply.)
  - a. TCP/IPv4
  - d. TCP/IPv6
8. Which of the following is *not* a typical Windows Server 2008 post-installation task?
  - a. Installing the Server Core role
9. Which of the following is a task you must do *during* Windows Server 2008 installation?
  - b. Choose the disk where it will be installed.
10. What command should you use to test your IP configuration settings after a new Windows Server 2008 installation?
  - c. Ping
11. Which graphical utility runs in Server Core?
  - b. Date and Time control panel
12. You installed Windows Server 2008 recently, and it has been running well for the past several days. You read about a critical security patch that has been available for about a week. You view the currently installed updates in Control Panel's Programs and Features and don't see any installed updates. You need to install this update immediately and make sure your server is kept up to date without your intervention in the future. What should you do?  
Configure Automatic Updates to download and install updates automatically. Then download and install updates manually by running Windows Update from Control Panel.

13. Which of the following is a reason for installing a new server? (Choose all that apply.)
  - a. Excessive load on existing servers
  - b. Fault tolerance
  - c. To isolate a new application
14. Windows Server Core is a good installation option with all but which of the following?
  - a. For running Windows Web Server 2008
15. You approach one of your servers running Server Core and you see a completely blank desktop except for the mouse pointer. You need to do some management tasks on the server. What should you do?
  - c. Press Ctrl+Alt+Delete and click Start Task Manager.
16. What command do you use to configure addresses for network interfaces?
  - c. netsh interface
17. You have just finished installing Windows Server 2008. You have assigned a server name and configured IP addresses. You have tested your configuration by using Ping to verify network connectivity with your default gateway and another server on the network, and everything worked fine. However, the next day a colleague tells you that when he tried to ping the server, his request timed out. You try to ping your colleague's computer and receive a reply just fine. Why can't your colleague ping your server successfully?
  - b. Windows Firewall is blocking the packets.
18. Which command do you use to restart Server Core?
  - a. shutdown /r /t 0
19. In Server Core, which command do you use to join your server to a Windows domain?
  - c. netdom join
20. Which of the following is the default setting for Windows Update after a new Windows Server 2008 installation?
  - d. Not enabled
21. You're about to install a new application on Windows Server 2008 running in Hyper-V. You're concerned that this application might cause conflicts with other applications and services on the virtual machine. You can take the server down for a short time if necessary, but you're concerned that if the application does cause problems, getting the server back in working order could take quite a long time. What is the best course of action?
  - d. Take a snapshot of the virtual machine, install the application, and then revert to the snapshot if necessary
22. The layer of software sitting between the server hardware and OS that allows multiple OSs to share hardware resources is called which of the following?
  - c. hypervisor
23. Virtual machines must be allocated a minimum of 1 GB RAM to run properly. True or False?  
False (Each VM has the same minimum RAM requirements as the OS being installed on the VM.)
24. Which of the following is an advantage of using virtual machines? (Choose all that apply.)
  - a. Fewer physical devices to manage
  - b. Lower overall power consumption

- c. Easier backup of servers
  - d. Facilitates testing
25. You want to install a new server in Hyper-V. You create the virtual machine and insert the installation DVD, only to find that the DVD drive on your server has failed. You need to install this virtual machine today and don't have any spare DVD drives handy, nor do you want to shut down the server to install a DVD drive, if you can avoid it. What can you do?
- b. Create an .iso file from the DVD and copy it to the server. Use the VM console to mount the .iso file as a virtual DVD.

## Case Projects

### Case Project 2-1: Adding a Server to Your Network

A server with a 64-bit processor and virtualization extensions makes the most sense, although nothing in the description currently requires this hardware. Thinking about future growth and the need to support more than 32 GB RAM might rule out a 32-bit processor. A server that supports 32 GB RAM or more is ideal, but for now, all indications are that 8 GB should be enough. SAS or SCSI drives should be used for their capability to handle a 24/7 duty cycle and ensure high performance. One dual-core or quad-core processor is probably fine for now, but getting a motherboard that supports additional processors is a good idea.

### Case Project 2-2: Choosing the Right Edition

The 64-bit version of Enterprise Edition makes the most sense for several reasons. Clustering might be needed in the future for fault tolerance, and this feature requires Enterprise Edition. The 64-bit version supports larger amounts of RAM, and Hyper-V is a potential server role in the future, which requires the 64-bit version. Remember, this company doubled computer users in six months, and more growth is anticipated. A full installation is needed so that the owner can log on and manage the MRP application. Also, you might need to install the Terminal Services role for laptop users' remote access to the MRP application, and Server Core doesn't support the Terminal Services role.

### Case Project 2-3: Server Post-installation Tasks

A good server name is something like CG-MRP1-DC, which describes this server's function and allows another server (MRP2, for instance) to be added by using similar naming notation. Obviously, answers can vary, but the name should indicate the server's specialized function. This server should probably be a second domain controller to provide load balancing and fault tolerance for Active Directory. Remember, users are seeing logon times increase because of the load on the server, and an additional DC should improve logon performance. Other tasks include configuring automatic updates, configuring static IP addresses, and setting date, time, and time zone.

### Case Project 2-4: Server Roles on the Second Server

The server roles should include Active Directory Domain Services to provide fault tolerance and load balancing for the existing server and Terminal Services for laptop users to run the MRP client remotely. You might also want to install the DNS role for DNS fault tolerance.